Claims

1. Circuit array for controlling two independent loads operable with rectified AC voltage (2, 3), comprising

a control unit (11) for generating a control signal for a semiconductor switch (14, 24), by means of which the two loads (2, 3) are each controllable as a factor of one control signal (17, 18) per load,

wherein the control unit (11) contains a phase detection device (6), by means of which a positive or negative phase of the AC voltage is detectable, and which furnishes an output signal (16) describing the current phase, and

wherein the control unit (11) contains a logic unit (19) for linking the control signals (17, 18) to the output signal (16) of the phase detection device (6) for determination of the control signal.

2. Circuit array according to claim 1, characterized in that a time control (7) is provided to generate at least one control signal (17).

3. Circuit array according to claim 1 or 2, characterized in that a sensor circuit (8) is provided to generate at least one control signal (18).

4. Circuit array according to one of claims 1 to 3, characterized in that the logic unit is a multiplexer.

5. Circuit array according to one of claims 1 to 4, characterized in that the circuit array is an integrated circuit component.

6. Electric device having an input (20) with two leads for AC voltage,

- a circuit array (11) according to one of claims 1 to 5, and

- a rectifier (D11 ... D14), which is connected to the AC voltage input (20), and which furnishes a rectified voltage to supply the loads (2, 3) and the circuit array (11) for controlling the loads (2, 3), wherein the rectifier (D11 ... D14) is executed in an open bridge circuit, in which a shared DC voltage output (21) is connected to a first load connection of the semiconductor switch (14, 24) and the open DC voltage outputs (22, 23) are each connected to one lead for a load (2, 3), the other lead of which is connected to the second load connection of the semiconductor switch (14, 24).